

ADJUSTABLE SUPPORT APPARATUS FOR MONITOR IN THE CAR

Background of the Invention

5 1. Field of the Invention

The present invention relates to a support apparatus for monitor in the car, more particularly, and to an adjustable support apparatus for monitor in the car which provides a support apparatus for monitor to rapidly adjust and assemble for the version of passengers at the rear seat.

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2. Description of the Related Art

The vehicle does not only provide the function of transportation, and more function is added in the car to elevate the quality of car, for example: the stereo, VCD player, multiple functions of monitor....etc. The manufacturers of vehicle do not only provide the transportation but also the extra functions. Further, the monitor is the most popular to add on the car because the monitor could provide the functions of audio and video. The assembly of the monitor is difficult due to the limitary space of the car. And, the rear seat of car is hard to see the monitor at the front of front seat. The Taiwan Patent No. 20 507704 discloses a structure which takes the monitor in the pillow so the manufacturers must produce many styles and colors of pillows for using the different color of inside of car. And, the monitor embeds in the pillow so the version angle only has one to watch. Meanwhile, the neighbor passenger could not watch so it is a disadvantage unless adding one more monitor.

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Summary of the Invention

It is an object of the present invention to provide an adjustable support

apparatus for monitor in the car which provides a structure to rapidly adjust and assemble for the passengers at the rear seat of car.

To achieve the above mentions, the adjustable support apparatus for monitor in the car of the present invention discloses an adjustable rod to pivot 5 a monitor and using two fastening members to fasten with the legs of pillows and using a pivot for adjusting the version of the passengers.

It is to be understood that both the foregoing general description and the following detailed description are exemplary, and are intended to provide further explanation of the invention as claimed.

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Brief Description of the Drawings

The accompanying drawing is included to provide a further understanding of the invention, and is incorporated in and constitutes a part of this specification. The drawing illustrates an embodiment of the invention and, 15 together with the description, serves to explain the principles of the invention.

In the drawing,

Fig. 1 is an illustrate view showing the adjustable support apparatus of the present invention;

Fig. 2 is a perspective view showing the adjustable support apparatus of 20 the present invention;

Fig. 3 is an illustrate view showing the operation of the adjustable support apparatus of the present invention;

Fig. 4 is an illustrate view showing another operation of the adjustable support apparatus of the present invention;

25 Fig. 5 is an illustrate view showing another operation of the adjustable support apparatus of the present invention;

Fig. 6 is an illustrate view of another embodiment showing the adjustable

support apparatus of the present invention;

Fig. 7 is a perspective view of another embodiment showing the adjustable support apparatus of the present invention;

Fig. 8 is a cross-sectional view of another embodiment showing the 5 adjustable support apparatus of the present invention;

Fig. 9 is an illustrate view of another embodiments showing the operation of the adjustable support apparatus of the present invention;

Fig. 10 is an illustrate view of another embodiments showing the operation of the adjustable support apparatus of the present invention; and

10 Fig.11 is an illustrate view of another embodiments showing the operation of the adjustable support apparatus of the present invention.

Detailed Description of the Preferred Embodiments

Reference will now be made in detail to the preferred embodiments of the 15 present invention, examples of which are illustrated in the accompanying drawings. Wherever possible, the same reference numbers are used in the drawings and the description to refer to the same or like parts.

Refer to Figs. 1 and 2, an adjustable support apparatus of the present invention comprises two fastening members 4 for fastening on legs B of pillow 20 and a monitor 6 for pivoting and an adjustable rod 5.

The fastening members 4 comprise a U-shape means 41 and a n-shape means 42, and the adjustable rod 5 is fastened on the legs B of pillow by the fastening members 4. At least one hole 411 of the U-shape means 41 is opposed to a hole 421 of the n-shape means 42 to fasten.

25 The adjustable rod 5 comprises a first means 51, a second means 52, a middle connecting member 53, a front connecting member 54 and a pivotal rod 55.

The first means 51 has two holes 511, 522 at each side, and the second means 52 have at least one hole 521 at the side neighboring to the hole 512.

The middle connecting member 53 connects between the first means 51 and the second means 52. The middle connecting member 53 has two holes 531 at each side and uses screw bolts B1 and nuts B2 for coupling to the hole 512 of first means 51 and the hole 521 of second means 52.

The front connecting member 54 connects between the first means 51 and a pivotal rod 55. The front connecting member 54 has two holes 541, 542 at each side and uses a screw bolt B4 and a nut B3 for coupling to the hole 511 of first means 51 and uses a adjustable bolt B5 and a nut B6 to couple to the hole 551 of pivotal rod 55.

The pivotal rod 55 being an extended rod has two holes 551, 552 to couple to a hole 542 of the front connecting member 54 and a pivotal means 61 of monitor 6.

Refer to Figs. 1 and 3, using two fastening members 4 fastens on the legs B of pillow and using the front connecting member 54 and pivotal rod 55 pivot with the pivotal means 6 of monitor 6. The passengers adjust the adjustable rod 5 moving left or right side to adjust the distance between the monitor 6 and the passengers in accordance to the version of passengers. And, using the pivotal rod 55 is adjusted the monitor moving left or right side by the screw bolt B5 and moving up and down by the screw bolt B7 for adjusting the best version of the passengers.

Refer to Figs. 6, 7 and 8 which illustrate another embodiment of the present invention.

The adjustable support of the present invention comprises two fastening members 1 fastened on the legs A of pillow, a monitor 3 having a pivotal means and an adjustable rod 2.

The fastening members 1 comprise a U-shape means 11 and a n-shape means 12, and the adjustable rod 2 is fastened on the legs A of pillow by the fastening members 1. At least one hole 111 of the U-shape means 11 is opposed to a hole 121 of the n-shape means 12 to fasten.

5 The adjustable rod 2 comprises a first means 21, a second means 22 and two rear connecting members 23, two middle connecting members 24, two front connecting members 25 and a pivotal rod 26.

10 The first means 21 parallel has two rods 211, 212. Further, the rod 211 has two holes 2111, 2112 at the each side and the rod 212 has two holes 2121, 2122 at the each side.

15 The second means 22 parallel has two rods 221, 222. Further, the rod 221 has two holes 2211, 2212 at the each side and the rod 222 has two holes 2221, 2222 at the each side.

20 The two rear connecting members 23 have two holes 231 at the each side and are couple dividedly to the hole 2212 of rod 221 and the hole 2222 of rod 222 by a screw bolt A1 and a nut A2.

25 The two middle connecting members 24 being a square sheet have four holes 241 and are coupled to the hole 2211 of rod 221 and hole 2221 of rod 222 and the hole 2112 of rod 211 and the hole 2122 of rod 212 by screw bolt A3 and nuts A4.

30 The two front connecting members 25 being a triangular sheet have three holes 251 and are coupled to the hole 2111 of rod 211 and the hole 2121 of rod 212 by screw bolts A5 and nuts A6. Further, the hole 252 of members 25 is conjugated to a hole 261 of the pivotal rod 26 by an adjustable screw bolt A7 and a nut A8.

35 The pivotal rod 26 being an extended rod has two holes 261, 262 to couple to the hole 252 of connecting members 25 and the pivotal means 31 of monitor

3.

Refer to Figs. 8 and 9, the adjustable rod 2 is fastened on the legs A of pillow by the fastening members 1. And, the first means 21 of adjustable rod 2 has a pivotal rod 26 pivoting to the pivotal means 31 of monitor 3.

5 Refer to Figs. 9, 10 and 11, the adjustable rod 2 moves left or right side for adjusting the distance between the passengers and the monitor 3. Further, the monitor 3 moves left or right side by adjusting the adjustable screw bolt A7 and down or up by adjusting the adjustable screw bolt A9.

10 The adjustable support apparatus of the present invention discloses a
10 adjustable structure for adjusting the monitor freely in accordance of the
version of passengers.

Therefore, the foregoing is considered as illustrative only of the principles
of the invention. Further, since numerous modifications and changes will
readily occur to those skilled in the art, it is not desired to limit the invention to
15 the exact construction and operation shown and described, and accordingly, all
suitable modifications and equivalents may be resorted to, falling within the
scope of the invention.